

IN THE SPECIFICATION

*On Page 1, following the Title and before the Technical Field section, please insert the following:*

This application is a U. S. National Phase Application of PCT International Application PCT/JP2004/010532

*On Page 6, please delete the first full paragraph and insert the following replacement paragraph:*

As shown in Fig. 2D, when a lower surface of second magnetism-proofing unit 20 is situated lower than a upper surface of first magnetism-proofing unit 19, parts of a lower lateral face of second magnetism-proofing unit 20 confront to parts of a center lateral face of heating coil 13 on first magnetism-proofing unit ~~20~~ 19. This structure allows forming a magnetic path having a smaller magnetic resistance and a better convergent efficiency and running from the center of coil 13 to the lower section of coil 13. As a result, leakage fluxes from the lower section to the center of coil 13 can be reduced. The foregoing structure suppresses self-heating of waveguide 16, so that the temperature rise of infrared sensor 15 due to radiation heat from waveguide 16 can be reduced, and an accuracy of detecting a temperature by sensor 15 can be improved.

*On Page 9, please delete the last paragraph, which continues on to Page 10, and insert the following replacement paragraph:*

Second magnetism-proofing unit 20 shapes like an arc sighted from the top and is divided into two pieces which are disposed at a space between shielding unit 21 and an inner rim (not shown) of heating coil 13. Thermistor 23 shown in dotted lines, a temperature sensing element, and its holder 22 are disposed at a space between the inner rim of heating coil 13 and waveguide 16. Thermistor 23 is urged against a top plate (not shown) by holder 22 and another urging member (not shown) such as a spring. This structure allows thermistor 23 to sense an absolute temperature near the point, where infrared sensor 15 measures a temperature of the pot base, by measuring a temperature of the rear face of the top plate. Since infrared sensor 15 is good at measuring a change in temperature; however, poor at measuring an absolute temperature, a temperature of load pot 11 can be controlled accurately with both of the

foregoing temperature sensing elements. Presence of second magnetism-proofing unit 20 made of ferrite and waveguide 24 16 made of aluminum allows the magnetic flux from heating coil 13 to become hard to intersect with a loop formed by thermistor 23 and its wiring. As a result, high-frequency noises induced by the loop are suppressed, so that influence of the high-frequency noises to the temperature sensing circuit coupled to thermistor 23 can be suppressed.